



Image of the Month

Deep ulcerative esophagitis: A rare presentation of gastrointestinal actinomycosis

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1. Case description

A 62-year-old woman, with a history of penicillin allergy, smoking and alcohol abuse, was referred to our department following an episode of symptomatic iron deficiency anemia (hemoglobin level 4,9g/dl, reference range >12,0g/dl). No clinical signs of bleeding were found. During the endoscopic workup, deep linear ulceration was identified in the distal esophagus, extending for approximately eight centimeters with extensive excavation and prominent edges (Fig. 1). Considering the patient's history, malignancy was a major concern. Surprisingly, biopsies revealed severe ulcerative esophagitis, rather than signs of neoplasia. Additional



Fig. 1. Endoscopic evaluation of the distal esophagus, demonstrating a deep longitudinal ulcer, extending for 8 centimeters with prominent edges and extensive excavation.

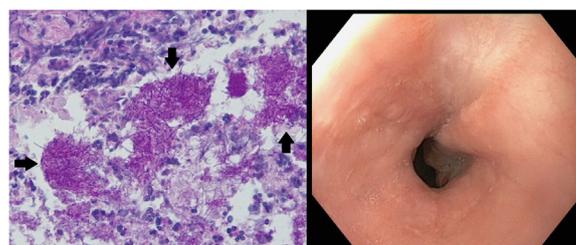


Fig. 2. Left: histological evaluation with PAS staining (x400), showing various PAS positive colonies with typical branching pseudohyphae (arrows). Right: endoscopic follow up after four weeks of doxycycline, confirming resolution of ulceration and inflammation with only mild residual scarring in the distal esophagus.

histological analysis with PAS staining detected various colonies of gram-positive bacteria exhibiting branching pseudohyphae, findings consistent with extensive actinomycosis (Fig. 2, arrows).

Actinomyces spp. are facultative anaerobic bacteria, predominantly affecting thoracic organs, the cervicofacial region and to a lesser extent, intra-abdominal organs. Although actinomycosis of the alimentary tract is rare, several manifestations have been reported, such as appendicitis, pelvic abscesses, colorectal lesions and exceptionally, ulcerative esophagitis [1]. As *Actinomyces spp.* may obscure underlying neoplasia, these patients should be evaluated thoroughly for malignancy [1]. In our patient, doxycycline was initiated at a dose of 100 mg twice daily for six months. Within four weeks of antimicrobial treatment, esophagogastroduodenoscopy revealed only mild residual scarring (Fig. 2, right). In conclusion, esophageal actinomycosis should be considered in patients with deep esophageal ulceration after underlying malignancy has been ruled out.

Conflict of interest

None declared.

Reference

- [1] Garner JP, Macdonald M, Kumar PK. Abdominal actinomycosis. *Int J Surg* 2007;5(6):441–8.

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